OUTER CONTINENTAL SHELF (OCS) SCIENTIFIC COMMITTEE (SC)
November 16-18, 1999
Summary

A. OCEAN Activities Update

Dr. Ken Turgeon, MMS Chief Scientist, briefed the Committee on the recently released Federal Ocean Report, *Turning to the Sea: America's Ocean Future.* This report stemmed from President Clinton's June 12, 1999, directive to his cabinet at the National Ocean Conference to report back to him within one year with recommendations for a coordinated, disciplined, long-term federal ocean policy. The report was prepared as part of an interagency effort in which the Department of the Interior (DOI) participated as one of the key Federal agencies with ocean resource responsibilities. In addition to Dr. Turgeon, Dr. Tom Kitsos, Deputy Director of MMS and Mr. Bob LaBelle, Chief of MMS's Environmental Division, served as DOI principals in the formulation and preparation of the report. Vice President Gore released the report at a press conference in Boston, Massachusetts, on September 2, 1999.

At that time, the Vice President announced the formation of an Under Secretary level Federal Ocean Task Force to implement the recommendations in the report. Dr. Turgeon presented the salient points of the ocean report and gave an update on the status and direction of the Ocean Task Force.

B. Physical/Biological Integration Workshop for Desoto Canyon and Adjacent Shelf Report

Dr. Jim Kendall, Chief, Environmental Studies Section, Gulf of Mexico Region, briefed the Committee on results of recently completed and ongoing MMS studies in the Northeastern Gulf of Mexico and suggested that more integration was needed between the biological and physical oceanographic disciplines. As such, the University of Alabama and the Dauphin Island Sea Lab co-hosted a workshop for the MMS on October 19-21, 1999, in Mobile, Alabama. The purpose of this workshop was to: 1) bring experts together to summarize what is known about the area; 2) determine critical issues; and 3) provide input to the design of an integrated physical and biological study to complete the "Northeastern Gulf of Mexico Physical Oceanography Program" and the "Northeastern Gulf of Mexico Coastal and Marine Ecosystem Program. "

C. Director's Presentation

Director Walt Rosenbusch has been with the MMS for the past six months as its Director and gave background information on his credentials. He cited the goal of the MMS is to be the unquestioned leader in both the domestic and international area of resource management and, in order to accomplish this goal, the MMS needs to reach out to groups such as the OCS SC and rely upon the science and the guidance that is given the MMS to better manage the OCS resources.

Director Rosenbush presented plaques to outgoing members' Drs. Biliana Cicin-Sain, Joanna Endter-Wada, and Lee Huskey. Outgoing members not in attendance to accept their plaques were Drs. Mary Altalo, Bill Merrell, and Jim O'Reilly. Dr. Endter-Wada was also presented a plaque in appreciation for her serving as the Chair for the past two years.

Dr. William Schroeder, Vice Chair of the Committee, presented the Director with *Gulf of Mexico Science,* a regional journal citing the results of years of research between the National Oceanographic and Atmospheric Administration and the MMS.

D. Associate Director's Presentation

Ms. Carolita Kallaur, Associate Director for Offshore Minerals Management, informed the Committee of the major offshore activities occurring in the MMS regional and headquarters offices.

One particular area of interest that she addressed was a recent MMS publication that presents the role of the OCS oil and natural gas program in meeting this Nation's sustainable development goals. She specifically addressed the three pillars of sustainable development: environment, economics, and society. The report is posted on the MMS website at http://www.mms.gov/sd/.

Another topic Ms. Kallaur discussed was the role of natural gas as the preferred fossil fuel for the future because of its cleaner burning qualities. A key concern in this regard is meeting this Nation's natural gas needs which are projected to increase to 33 trillion cubic feet per year. Because it is not economical to import natural gas from foreign nations, the United States must look to developing its domestic supplies, including those on the outer continental shelf. Therefore, it's important that the MMS has a dialogue with industry and other stakeholders about what role the OCS may play in the future.

Associate Director Kallaur discussed the international aspect of the offshore oil and gas program. To date, much of the focus has been on safety issues; however, there is also an environmental component to a lot of what's going on internationally. It is felt there should be standardized training requirements for people working on rigs recognizing that these rigs are all often regionally different in terms of climate. It's believed that in terms of sustainable development, by having discussions with other regulators and industry, a basis can be set where the MMS will be able to help some of the countries who are new to offshore oil and gas activity. Over time, it can increase both environmental and safety performance.

Associate Director Kallaur touched upon some of the activities taking place in the regions:

Gulf of Mexico Region. Due to deepwater drilling, a 279 percent increase in production over the past five years has been reported; natural gas from deepwater gas production has risen 250 percent during the same period. There are over 3,000 leases in water depths greater than 800 meters compared to last November's 29 deepwater rigs drilling in water depths greater than 300 meters.

Since there has been an increase in deepwater activity, the MMS has prepared an environmental assessment report identifying certain deepwater drilling issues and these issues may require the MMS to do extensive environmental analyses. The report was expected to be released late in 1999.

The use of floating production, storage and offloading (FPSO) facilities is being considered for the Gulf of Mexico OCS. Although FPSOs are in use around the world for production and storage, the MMS has decided an Environmental Impact Statement (EIS) needs to be performed regarding using these vessels in U.S. waters. There are FPSOs being used in Norway and in other parts of the world, and the MMS is exchanging dialogue with these countries to learn from their experiences before they can be permitted in the Gulf. Industry is also studying FPSOs and their uses and the MMS will use their findings to determine the use of FPSOs in the Gulf.

An environmental assessment is also being conducted on seismic exploration to determine whether or not further work is warranted on this subject.

Ms. Kallaur announced that the draft EIS has been completed on Destin Dome 56 which is a natural gas project, and a sale in the Eastern Gulf of Mexico, which is significant because it will be the first sale in 12 years, is scheduled for 2001.

Pacific Region. Associate Director Kallaur addressed the COOGER study which as been ongoing since 1995 to look at the onshore effects of offshore oil and gas activity. This project was completed and a meeting is going to be held the end of October 2000 to conclude this project.

Exxon recently has set a record for extended reach drilling in California. Since California wants to avoid erecting a new facility, Exxon determined it would be easier to drill at a long distance. The well is more than 18,600 feet in length and is being drilled at a depth of 6,000 feet. This has allowed Exxon to tap into 71 million barrels of oil and 207 million cubic feet of natural gas.

The MMS announced recently that there has been a suspension of operation and production for 36 leases in the Pacific Ocean. All of the facilities will undergo an EIS that are planning to use mobile offshore drilling rigs and two of those facilities will undergo environmental assessments. The plan is to bring one rig in to California and it would move from facility to facility.

The MMS Pacific Region is also initiating an endangered species consultation and essential fish habitat consultation.

Alaska Region. The environmental work has been completed on the Northstar proposal which is a state project but a portion of the land is in Federal waters. It is expected that there could be activity next year, although a lawsuit has been filed by Greenpeace.

One issue in regards to the Northstar project is the question of laying pipeline in subsea permafrost. This has not been done previously, and it is hoped that what is learned from this process can be shared with others.

The Liberty project is a development and production plan being done in the Beaufort Sea with BP/Amoco being the operator. A facilitator has been hired by BP/Amoco to try to work through any issues which may arise with the different stakeholders.

A lease sale, Sale 176, is scheduled for 2002 in the Beaufort Sea in an area that will be covered in the environmental impact statement.

A workshop was recently held in Alaska to identify monitoring needs in the areas around Northstar and Liberty, as well as the areas that which may be leased in Sale 176.

Ms. Kallaur thanked the Artic Nearshore Impact Monitoring in Development Areas subcommittee members and has appreciated the help that has been received in looking at some of the monitoring needs in the areas around Northstar and Liberty, as well as areas that may be included in Sale 176.

Headquarters. An Environmental Forum was held in association with the Policy Committee. The purpose of the forum was to reach out and have more dialogue with the environmental community. The main topic was sustainable development; OCS sand for coastal protection and the potential for methane hydrates was also discussed.

E. Technology Assessment and Research Report

Ms. Amy White, a Petroleum Engineer for the Technology Assessment and Research Program (TAR), presented a brief overview of the TAR Program objectives: identified key ongoing projects in both the Operations Safety & Engineering Research and Oil Spill Research components; discussed the roles of OTRC and OHMSETT in the TAR Program activities; and discussed the focus of the FY 2000 TAR Program funding priorities.

F. National Oceanographic Partnership Program Presentation

Dr. Steve Ramberg, Chair of the National Oceanographic Partnership Program (NOPP) Interagency Working Group, gave an update on NOPP activities. The NOPP was established by Congress in 1997 to foster interagency cooperation in ocean research by supporting programs that emphasize partnering by academia, industry and government. Since then, its programs have grown to about $66M invested in basic and early applied research on topics that are well-suited to collective agency attention and multi-partnering at performance. Over 110 partners from industry (33), academia (53), government (25) and non-profit institutions (14) are involved in the funded programs to date, bringing approximately $50M in cost-shared resources. Examples include instrumentation developments, natural laboratories, community-based modeling and data assimilation efforts, education, and more recently a framework for a US integrated ocean observation and prediction system serving the full range of US ocean research and application interests. More information can be found starting at the website http://www.nopp.org.

G. Ocean Studies Board Presentation

Dr. Ken Brink, Chair of the Ocean Studies Board (OSB) gave a status report on OSB ongoing and planned activities. The OSB was established by the National Research Council to advise the federal government on issues of ocean science and policy. In addition to exercising leadership within the ocean science community, the Board undertakes studies at the request of Federal agencies, Congress or other sponsors, or upon its own initiative. The Board explores the science, technology, policies and infrastructure needed to understand and protect coastal and marine environments and resources. The Board normally meets about three times per year, but much of the activity takes place in the form of committees appointed especially to deal with particular studies. There are at least two informal subgroups of the Board that normally have additional meetings: a group dealing with fisheries and a newer group dealing with ocean engineering and technology.

With the redefinition of the former Marine Board, the Ocean Studies Board has taken a much more active interest in more practical problems involving marine technology, the petroleum industry, and coastal engineering, for example. One reflection of this will be an increased membership on the Board of people from the marine engineering and technology community.

Further, the Board will, of course, be taking on more studies along this line. Currently, the Board is beginning a study on inputs of oil in the sea, and this effort will likely be extended to include fates and effects. The Board is, in addition, actively developing other technologically oriented studies that will likely be announced over the coming months.

H. Sand and Gravel Program: Status Update

Mr. Khaled Bassim, an oceanographer in MMS's International Activities and Marine Minerals Division, talked about MMS's sand and gravel program. Since 1991, the MMS has been conducting studies to evaluate the environmental impacts of offshore dredging for sand for beach nourishment activities and for construction aggregate material. The early studies took an overview approach by focussing on collecting available information and literature and on the general nature of available technologies and mitigation. More recently, site-specific studies have been ongoing to examine the biological and physical effects associated with dredging in particular areas. Studies offshore Virginia and Alabama have been completed and studies are ongoing offshore New Jersey, Maryland/Delaware, and North Carolina; a study to take place offshore the east coast of Florida is currently in procurement.

Public Law 103-426 enacted October 1994, authorizes the Secretary of the Interior to negotiate agreements for the use of OCS sand, gravel, and shell resources for programs undertaken by Federal, State, or local governments which involve certain public works projects, i.e., for shore protection, beach restoration, or coastal wetlands restoration. To date, negotiated agreements have been completed with the Navy, the Park Service, the City of Virginia Beach, Duval County, Florida, and Myrtle Beach. The MMS is currently negotiating with the States of Maryland and Alabama and with Brevard County, Florida.

The MMS is also investigating the possibility of conducting a competitive sale for offshore sand and gravel for construction aggregate offshore northern New Jersey. The MMS continues to conduct research in the United Kingdom to provide relevant information on the biological and physical effects of offshore aggregate dredging.

I. OCS Resource Management and Sustainable Development

Dr. Bob LaBelle, Chief, Environmental Division, stated that the MMS has recently posted a 'living document' on its homepage (http://www.mms.gov/sd/) that explores the concept of sustainable development and OCS resource management. In June of this year, the Associate Director commissioned an internal team to assess what the Offshore Minerals Management program is presently doing and should be doing to better incorporate aspects of sustainability. The resulting report was discussed, stressing the contribution of economics, social aspects and environmental protection to true sustainable development.

J. Policy Committee Presentation and Discussion

Mr. Don Oltz, Vice chair of the OCS Policy Committee, briefed the OCS SC on current activities of the Policy Committee (please see the OCS Policy Committee homepage for what transpired at its October, 1999 meeting).

K. Social and Economic Planning Conference Findings and Recommendations

Dr. Rodney Cluck, Sociologist, Environmental Studies Branch, reported that from August 24 through August 26, 1999, 60 social scientists and personnel of the MMS gathered in Park City, Utah, to discuss the Environmental Studies Program agenda for socioeconomic research. The task was to review past and ongoing research and identify the issues that were most pressing. The conference proceedings will be used to guide MMS social science in research, mitigation and decision making for Outer Continental Shelf oil and gas development. The conference supported the national and regional studies planning by defining linkages among study efforts conducted by MMS and developing logical long-term planning strategies at the regional and national levels.

Three members of the social science subcommittee (Lee Huskey of University of Alaska, Joanna Endter-Wada of Utah State University, and Stan Albrecht of Utah State University) offered their observations on the MMS socioeconomic studies program and the conference proceedings. Having served on the committee since the early nineties, they noted that higher-level agency support for socioeconomic research had increased considerably during the decade. They also commended the socioeconomic studies program for its responsiveness to changes in the oil industry, to the 1992 recommendations of the National Research Council, to political circumstances in the regions, and to the SC's own recommendations.

This session considered the Social and Economic Planning Conference findings and recommendations as well as specific regional issues raised and what was learned as a result of the conference.

L. ANIMIDA - Artic Nearshore Impact Monitoring In Development Area Session: MMS's Beaufort Sea Monitoring Program

Dr. Cleve Cowles, Chief, Environmental Studies Section, Alaska, explained that ANIMIDA is a multi-year, multidisciplinary study to monitor impacts associated with development activities and initial production of oil from the Northstar and Liberty Units in the nearshore portion of the Alaska OCS in the Beaufort Sea. Phase I is a 1.5-year program and will include a focused literature review, monitoring for physical environmental parameters (sediment quality, resuspension of sediments, underwater noise and vibration), a workshop, and developing and ranking Phase II studies. Phase II is anticipated as an expanded additional four-year monitoring program, which will provide a basis of continuity and consistency in evaluation of potential impacts of upcoming development and production in the Beaufort Sea. The project will be closely coordinated with related ongoing MMS-managed studies and studies being conducted under the MMS/University of Alaska Fairbanks cooperative Coastal Marine Institute. A contract was awarded to Arthur D. Little, Inc. June 30, 1999, to perform Phase I tasks and to serve as Program Manager for the duration of the study. Total estimated cost of the ANIMIDA multi-year monitoring project is estimated to be $3,067,000 through Fiscal Year 2003.

M. Coastal Marine Institutes Session

Mr. Jim Cimato, Oceanographer, Environmental Studies Branch, stated that the MMS Coastal Marine Institute (CMI) initiative was proposed in 1991 as an MMS-State partnership to strengthen relationships with coastal states where OCS oil and gas activities take place, and to improve the information flow to the affected States and the public. It accomplishes this by using State institutions of higher education to conduct research on issues of mutual concern to both the State and MMS. This research is focused on environmental and socioeconomic aspects of OCS oil and gas and marine mineral development activities. Through the CMI's, increasing numbers of students and faculty are engaging in OCS related research, developing new skills, and developing new information and approaches to solving management issues.

In recognition of the mutual need for critical scientific information for resource management decisions, the CMI program leverages MMS funds with State funds (one-to-one matching is required) so that more research can be done than if MMS funded all the work itself. The first cooperative agreement under the CMI program was signed in 1992 with the *State of Louisiana* and *Louisiana State University* (LSU). A second cooperative agreement was signed with the *State of Alaska* and the *University of Alaska* in 1993. A third agreement was signed with the *University of California at Santa Barbara* (UCSB) in 1994. The cooperative agreements with LSU and the University of Alaska have recently been renewed for another 5 years. Renewal of the cooperative agreement with UCSB is up for consideration in FY 2000. Approximately 20% of the Environmental Studies Program budget is allocated to research conducted through the CMI's.

N. Deepwater Gulf of Mexico Session

Discussion Leader -- Dr. Jim Kendall, Chief, Environmental Studies Section, Gulf of Mexico

Background: The oil and gas industry is showing great interest in the deepwater portions of the Gulf of Mexico. Advancements in deepwater drilling technology over the past few years have enabled the industry to move out into water depths exceeding 7,500 feet, something unheard of only 5-6 years ago. As a result, the number and percentage of deepwater tracts leased in the Gulf of Mexico has grown exponentially during the past few years and there are now more than 1,800 existing oil and gas leases in water depths of 1,000 ft or greater in the Central and Western Gulf of Mexico planning areas. This new frontier brings with it new issues that the MMS must consider in its ocean resources management role.

The MMS, along with Louisiana State University, sponsored a Deepwater Drilling Workshop on July 30, 1997. The purpose of this workshop was to promote dialogue among academic, scientists, industry, and MMS representatives concerning the potential development of new technology for drilling in ultra-deep water. This workshop focused both on defining the environmental and socioeconomic problems that will be unique to deepwater operations and on potential problem solutions.

The OCS SC Deepwater Subcommittee convened October 1-2, 1997, in New Orleans, Louisiana. The purpose of this meeting was to initiate in-depth subcommittee activity on providing advice and guidance to MMS on deepwater information needs using the recent deepwater workshop sponsored by MMS and LSU. Focus was on identifying issues and information needs with direct reference/application to MMS decision making and management responsibilities.

The arrival of the deepwater era in the Gulf of Mexico brings new, and often unique, environmental, socioeconomic and technological concerns and issues to all the stakeholders, and especially to MMS in terms of its management responsibility and decision making information requirements.

O. Environmental Studies Program Session: Overview of FY 2001-2002 Annual Study Plans

Mr. Jim Cimato, Environmental Studies Branch, stated that the Annual Study Plans have been developed by the Regions and Headquarters to describe proposed studies which will support ongoing and planned OCS Program activities. Annual Study Plans briefly describe regional OCS Program activities, environmental issues and information needs, and available information and ongoing research as the basis for identifying research proposed for the future. Study plans are for planning purposes only and do not imply commitment by the Agency as many factors are subject to change. The current annual study plans are developed based on the Environmental Studies Program National Strategic Plan (1998-2002) which analyzed and summarized a wide variety of environmental concerns and issues on a national scale by identifying emerging and ongoing program areas.